

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of	)	
Robert and Frederick Kirtlan for	)	
Review of Order No. 74-492 (NPDES	)	Order No. WQ 75-8
No. CA0077682) of the California	)	
Regional Water Quality Control	)	
Board, Central Valley Region	)	

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BY BOARD MEMBERS DODSON AND AUER:

On November 22, 1974, Robert Kirtlan and Frederick Kirtlan (petitioners) petitioned the State Water Resources Control Board (State Board) for review of Order No. 74-492 (NPDES No. CA0077682) of the California Regional Water Quality Control Board, Central Valley Region (Regional Board). Order No. 74-492 was adopted on October 25, 1974, and prescribed waste discharge requirements for a discharge to the Sacramento River by the Central Sanitation District of Sacramento County and Sacramento Regional County Sanitation District (SRCSD).

On February 19, 1975, the State Board held a hearing for the purpose of receiving evidence relative to the appropriateness and propriety of adoption of Order No. 74-492 by the Regional Board.

I. BACKGROUND

On June 15, 1971, the Regional Board adopted a water quality control plan for the Sacramento River Subbasin and the

Sacramento-San Joaquin Delta Subbasin.<sup>1</sup> The plan noted that the Sacramento area presented "the most complex sewage disposal problem in the Sacramento River Basin," and contemplated in-depth studies of the problems involved, including the concept of consolidation of treatment plants in the Sacramento metropolitan area. Numerous in-depth studies have since been undertaken and completed on the problems involved and appropriate solutions.

While we shall not detail the entire background, we do note that the City of Sacramento and Sacramento County began working together as early as 1972 to consider the feasibility of development of a regional approach to wastewater management within the Sacramento metropolitan area. The project report and Environmental Impact Report<sup>2</sup> for a Sacramento Regional Wastewater Management Program was prepared in March of 1973, approved by the City and the County, and submitted to the State Board. This project report recommended a comprehensive regional program that would provide wastewater collection, treatment and disposal for all wastes within the area. Treatment was to be accomplished at two major regional plants, an expanded County Central Plant and an expanded Natomas Plant.

The State Board, by letter of June 29, 1973, approved the project concept and authorized the City and the County to

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1. See Interim Water Quality Control Plan for the Central Valley Region, Sacramento River Basin and Sacramento-San Joaquin Delta Basin, June, 1971.
  2. See Draft Environmental Impact Report for the Sacramento Regional Wastewater Management Program, March, 1973.

proceed with design of the initial expansion of the proposed expanded facilities at the County Central Plant and with more detailed planning on other project elements.

In October of 1973, the Sacramento County Board of Supervisors directed formation of SRCSD for the purpose of financing, constructing and operating the proposed regional system.

Subsequent studies and planning resulted in a supplemental project report in March of 1974. This supplemental report and Environmental Impact Report concluded that the preferred regional plan should consist of a single regional plant located near the County Central Plant.

In December of 1973, SRCSD submitted a report of waste discharge and application for NPDES permit. A supplementary application was received in July of 1974. In substance, the Central Sanitation District of Sacramento County operated the existing County Central Plant with an existing design capacity of 25 mgd. This plant, which had an existing flow of approximately 16 mgd (annual daily average), was in the process of being enlarged to 30 mgd. Wastes from the existing plant were being discharged to the Sacramento River approximately 600 feet downstream from the Freeport Bridge.

SRCSD proposed to construct a 125 mgd secondary treatment plant at the present site of the County Central Plant. Waste would be discharged in the same area as the present discharge, i.e., 600 feet downstream from the Freeport Bridge.

In April of 1974, a supplemental report entitled April 1974, Outfall Criteria and Draft Environmental Impact Report<sup>3</sup> was prepared and submitted to various agencies. At the time of the State Board hearing on February 19, 1975, we were advised that this report had been withdrawn. Our review of the record does not indicate that this report played any significant part in the adoption of Order No. 74-492 by the Regional Board on October 25, 1974.

By January of 1975, SRCSD had prepared and distributed a new and revised Outfall Project Report and Draft Environmental Impact Report.<sup>4</sup> At the time of our hearing on February 19, 1975, the Environmental Impact Report on the outfall project had not been finalized. However, the hearing record was held open and the final and approved Environmental Impact Report has been received and reviewed as a part of our review in this matter.

## II. CONTENTIONS AND FINDINGS

The petitioners generally allege that the action of the Regional Board in adopting Order No. 74-492 was inappropriate and improper because the action was premature, unsupported by substantial evidence, and contrary to state and federal law. More specifically, the contentions of the petitioners and our findings relative thereto are as follows:

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3. See petitioners' Exhibit No. 2.
  4. See petitioners' Exhibit No. 4.

1. Contention: The action of the Regional Board was premature in that the Regional Board adopted Order No. 74-492 prior to completion of an Environmental Impact Report (EIR) for the proposed outfall project. Petitioners contend that compliance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) required the Regional Board to await preparation of an EIR on the outfall prior to adoption of Order No. 74-492.

Finding: While it is not true that the California Environmental Quality Act (CEQA) required the Regional Board to await the EIR for the outfall project, we do believe that, in this particular case, the Regional Board should have awaited and reviewed the EIR on the outfall before adopting Order No. 74-492.

The proposed discharge is subject to regulation pursuant to Chapter 5.5 of the Porter-Cologne Water Quality Control Act. (Water Code Section 13370, et seq.) Water Code Section 13389 specifically provides:

"Neither the state board nor the regional boards shall be required to comply with the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code prior to the adoption of any waste discharge requirement, except requirements for new sources as defined in the Federal Water Pollution Control Act or acts amendatory thereof or supplementary thereto." (Emphasis added.)

Pursuant to Water Code Section 13389, our regulations specifically provide:

"Environmental documents are not required for adoption of waste discharge requirements under Chapter 5.5, Division 7, of the Water Code, except requirements for new sources as defined in the Federal Water Pollution Control Act. This exemption is in accordance with Water Code Section 13389 which does not apply to the policy provisions of Chapter 1 of CEQA." (Section 2716, Subchapter 17, Chapter 3, Title 23 of California Administrative Code.) (Emphasis added.)

The term "new source", as defined by the Federal Water Pollution Control Act pertains only to industrial dischargers. It does not presently pertain to a municipal discharger or proposed discharger such as the Central Sanitation District of Sacramento County or SRCSD. [See Section 306 Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500).] Consequently, it is clear that the Regional Board was not required to await the EIR on the outfall project prior to adoption of Order No. 74-492.

However, neither Water Code Section 13389 nor Section 2716 of our regulations provides for or implies a complete exemption from CEQA when issuing waste discharge requirements under Chapter 5.5, Division 7, of the Water Code. The statute and the regulations leave the Regional Board and the State Board subject to the policy provisions of CEQA which are set forth in Public Resources Code Sections 21000 and 21001. These policy provisions clearly indicate that all state agencies which regulate activities which may significantly affect the quality of the environment shall give major consideration to protection of the environment.

It is therefore one thing to say that the Regional Board was not required to await an EIR on the outfall before

adoption of Order No. 74-492; it is entirely another matter as to whether they should have adopted Order No. 74-492 without reviewing an EIR on the outfall portion of the project.

The proposed project, particularly the outfall portion thereof, involves potentially significant and far-reaching environmental consequences. The outfall portion of the project has also entailed significant public controversy and concern. While it is difficult to ascertain how much of the controversy is engendered by economic concern as opposed to environmental concern, the project is substantial with results which potentially will be environmentally significant, and we believe that both the State Board and the Regional Board should have the advantage of the best information available regarding this project and its effects when taking action relative to the project.

To date, we have not found it appropriate to fix any firm rule or policy to determine when a Regional Board should await an EIR on a project for which waste discharge requirements are sought, even though an EIR may not be required as a legal condition to the issuance of such requirements. We do generally believe that, in the absence of compelling considerations to the contrary, the Regional Boards should at least await and consider an EIR for substantial projects which may involve potentially significant environmental effects, some of which may be detrimental, even though the project may at the same time involve substantial benefits.

While there is discretion in the Regional Board and in the State Board on this subject, we believe that this approach will most effectively carry out the policy directions of CEQA.

We are not aware of any compelling considerations which would entail the issuance of waste discharge requirements for the proposed discharge of SRCSD prior to development and consideration of an EIR for the outfall project. While it is true that there was a compelling reason for adoption of waste discharge requirements for the existing discharge from the County Central Plant by December 31, 1974, since failure to adopt requirements for that discharge would have placed the discharger in violation of law, the same considerations do not apply to the proposed discharge of SRCSD. [See Sections 402(k) and 301(a) Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500).]

As previously indicated, we have received and reviewed the final EIR for the outfall project as a part of our consideration of this petition.

2. Contention: The petitioners allege that, due to failure of the Regional Board to await an appropriate EIR, the Regional Board failed to consider fully or properly the outfall project and its ecological, environmental and health impacts. Specifically, petitioners contend that the Regional Board did not consider the effect of "slack flows" or "reverse flow" in the Sacramento River at the point of the proposed outfall, nor the possible adverse effects of the discharge on

a proposed domestic intake facility located upstream from the outfall. In addition, at the hearing on February 19, 1975, petitioners contended that the proposed project would adversely affect fish and aquatic life in the Sacramento River and would adversely affect the proposed Peripheral Canal, and that a single discharge of the magnitude of the discharge proposed constituted a much greater hazard than multiple discharges located at numerous points along the River. For the sake of clarity, we will consider each of these contentions separately.

A. Slack and Reverse Flows: Petitioners contend that "slack flows" and "reverse flow" occur in the vicinity of the proposed discharge.<sup>5</sup> As a consequence, they contend that there will be a concentration of effluent in the river at and above the discharge point during slack and reverse flows.

Findings. Studies pertaining to this contention were not completed at the time of adoption of Order No. 74-492 by the Regional Board. There was some evidence before the Regional Board which indicated that the proposed project had some storage facilities which could be used during periods of slack and reverse flows to prevent discharge during these periods.

Considerable evidence on this subject was presented at the hearing before the State Board, including oral testimony, the January 1975 Draft Environmental Impact Report, and written

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5. "Slack flow" as used herein signifies a downstream velocity in the Sacramento River of less than 0.5 feet per second (fps) at the point of the discharge. "Reverse flow" as used herein signifies an upstream flow of River waters at the point of the discharge.

comments. We also have the benefit of the final and approved Environmental Report on the outfall project.

On the basis of the evidence presently available to the State Board, it appears that there is a probability of slack and reverse flow in the Sacramento River at the point of the proposed outfall. This subject is extensively covered in the final Environmental Impact Report on the outfall.

The actual velocity of River flow at which a problem may arise related to slack and reverse flow appears to involve a velocity of less than 0.5 feet per second (fps) at the outfall. At velocities of less than 0.5 fps at the outfall, the diffuser design is such that adequate mixing of waste effluent and River water will not occur. If discharges to the River are continued at periods when velocity of River flow at the point of the discharge is less than 0.5 fps, there will be a build-up in concentration of wastewaters in the vicinity of the outfall. For example, if slack and reverse flow did not occur in the Sacramento River, the waste concentration in the River would not exceed 5 percent. However, if waste discharge from the proposed project is continued during periods of slack or reverse flow, the effluent concentration in the River could approach 30 percent under the worst conditions to be reasonably anticipated.

To eliminate the possibility of a build-up of effluent concentration, SRCSD proposes to terminate discharge from the outfall during periods of slack and reverse flow in the Sacramento River at the point of the outfall. The effluent during

these periods of time will be stored in contingency storage basins. The project as presently proposed will provide contingency storage basin capacity of at least 250 million gallons.<sup>6</sup>

Our review of the evidence indicates that, under all reasonably foreseeable conditions, the present available storage capacity is more than sufficient to provide that storage necessary to preclude discharge during slack and reverse flow. Under the most severe combination of conditions reasonably anticipated (wet weather plant inflow and maximum duration of slack and reverse flow), only about 122 million gallons of the storage capacity presently available would be required to prevent discharge during slack and reverse flow period. The evidence also indicates that, under all reasonably foreseeable conditions, stored effluent together with influent can be discharged without increase of effluent concentrations in River water in excess of 5 percent. (See Appendices I and II attached hereto.)

B. Adverse Effects of Proposed Discharge on a Proposed Domestic Intake Facility. The City of Sacramento presently proposes to install a domestic water intake facility approximately 7,000 feet upstream from the proposed outfall location. Petitioners contend that reverse flow in the Sacramento River at

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6. In addition to this storage capacity, the final Environmental Impact Report on the outfall indicates that additional dry weather storage capacity of approximately 50 million gallons should be available at the City Main Plant. Also, the present site encompasses approximately 2,500 acres and, if necessary, additional storage capacity can be provided.

and above the proposed outfall will adversely affect the water supplies obtained at this proposed intake.

Findings. The evidence indicates otherwise. The maximum upstream excursion of effluent from the proposed outfall will be 1,400 feet even if the discharge of effluent were continued during slack and reverse flows. On the evidence before us, under no circumstances can it be anticipated that the proposed discharge will have any effect upon the proposed City of Sacramento domestic water intake.

C. Adverse Effects on Fish and Aquatic Life.

Petitioners introduced some evidence related to a possible "curtain effect" resulting from the proposed discharge. As we understand the evidence presented, the contention was that the proposed diffuser which would substantially span the entire width of the River at the proposed point of discharge might disrupt the migratory pattern of fish in the River.

Findings. The California Department of Fish and Game concurred in the adoption of Order No. 74-492 by the Regional Board. In addition, the consultant for SRCSD testified that similar facilities had been installed elsewhere, and that there was no evidence that such facilities would have the detrimental effects on fish and aquatic life which petitioners contend. After review of the entire record on this subject, we are not persuaded that petitioners' speculations on this subject are correct.<sup>7</sup>

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7. We note in particular a rather complete rebuttal of the petitioners' speculations set forth in the Supplemental Project Report and Environmental Impact Report dated March of 1975. See in particular pp. I-44 through I-57.

D. Adverse Effect on Peripheral Canal. The proposed Peripheral Canal, if and when constructed, will take water from the Sacramento River and transport it to the Clifton Court Forebay and thence to southern California through the California Aqueduct. The proposed intake for the Peripheral Canal is projected at a point some five to six miles downstream from the outfall proposed by SRCSD. Petitioners contend that the discharge from the outfall may adversely affect waters to be transported in the proposed Peripheral Canal.

Findings. The California Department of Health concurred in the adoption of Order No. 74-492 by the Regional Board. The Department specifically considered the problem pointed out by the petitioners at the hearing conducted by the Regional Board. It appeared the discharge would ordinarily amount to less than an average of one percent of the River flow, and that even at low flow periods the waste discharge would amount to approximately an average of two percent of River flows at the proposed Peripheral Canal intake. The Regional Board adopted the stringent bacteriological limitations recommended by the Department of Health. The Department indicated unconditional concurrence with Order No. 74-492 as adopted.

We should also point out that the Department of Health indicated that the proposed project with its outfall near Freeport was in fact preferable to various alternatives, including discharge below the proposed Peripheral Canal intake.

E. Adverse Effects of a Single Discharge. Petitioners contend that a single discharge of the magnitude of that proposed by SRCSD is less desirable than numerous smaller discharges, since a large single discharge presents the possibility of catastrophic damage in the event of plant disruption.

Findings. There are obviously advantages and disadvantages associated with regionalization of treatment facilities which normally result in one or more discharges of substantial quantities of wastewater. In this particular case, the proposed project will combine the treatment capacities of approximately 21 small treatment plants presently operating in the Sacramento metropolitan area. The major advantage of a large treatment facility such as that proposed by SRCSD is that a high degree of flexibility and reliability can be built into the system.

In this particular case, the design of the plant calls for all major process drives and process units to be provided in multiples so that the plant will continue to operate with the largest single unit out of service. Flexibility in operation will be provided by multiple units with the ability to take units in and out of service without disruption of the treatment process. Provision will be made to dewater and service every tank without disrupting flow through the plant. Dual channels will be provided in almost all cases. Complete dual channelization is anticipated in the future when the oxidation tanks are expanded. The magnitude and adequacy of storage capacity has already been generally discussed and will not be repeated here. Power from two independent sources to energize the plant will be provided.

This subject has obviously been of great concern to SRCSD itself, and is extensively discussed in the Environmental Impact Report for the outfall.

The major disadvantage of a large regional facility is the disadvantage specified by the petitioners. At the same time, it is apparent that proliferation of smaller treatment facilities has its own inherent disadvantages. Perhaps the major disadvantage of a number of smaller treatment facilities is the fact that high flexibility and reliability cannot reasonably be provided for each facility. In addition, in the event of strike, it would require more supervisory personnel to continue the operations of a number of smaller facilities than to continue the operation of a regionalized facility.

In connection with the subject of strikes or other labor disruptions, petitioners do specifically contend that the Regional Board failed to take appropriate action to protect against strikes. While SRCSD will have a comprehensive operation and maintenance manual, our review of the record does not indicate that SRCSD is actually required to develop and prepare to implement an appropriate contingency plan which will provide for continuation of plant operations during a strike, other labor disruption, or other foreseeable emergency. We believe that a direct requirement for development of such a contingency should be imposed on this discharger.

Obviously, the various advantages and disadvantages of regionalization and nonregionalization must be weighed in each particular case. We have already pointed out the lengthy

and complex studies and considerations which have ultimately evolved into a determination by the City of Sacramento and the County of Sacramento that facilities in the metropolitan area should be regionalized. We concur.

F. Other Contentions. A number of other contentions and considerations have been raised or at least mentioned by petitioners. These include contentions of possible contamination of well waters in the vicinity of the proposed outfall, possible degeneration of stored wastewaters, and the possibility that the discharger will violate waste discharge requirements.

Findings. Direct evidence during the course of the State Board hearing indicated that there is no reasonable probability that the proposed discharge will adversely affect wells in the vicinity of the outfall, either above or below the outfall. Stored wastewaters will be reprocessed through the plant prior to discharge. There obviously is a possibility that the discharger will not meet waste discharge requirements. This is true in the case of every discharger. Both the Regional Board and the State Board will take all necessary steps to see that this discharger, and all other dischargers, meet appropriate requirements. We therefore find these latter contentions to be without merit.

### III. CONCLUSIONS

After review of the entire record, and for the reasons heretofore expressed, we conclude that the action of the Regional

Board in adopting Order No. 74-492 was inappropriate and improper for the following reasons only:

1. In this particular case, the Regional Board should have awaited and reviewed the final Environmental Impact Report for the outfall project prior to adoption of Order No. 74-492.

2. Waste discharge requirements for the proposed project should prohibit discharge of wastewaters when the downstream velocity in the Sacramento River at the point of the discharge is less than 0.5 fps (approximately 4,000 cubic feet per second).

3. Waste discharge requirements for the proposed project should require SRCSD to develop and prepare to implement an appropriate contingency plan which will provide for continuation of facility operations during strikes, other labor disruptions, or any other foreseeable emergencies. Said contingency plan should be submitted to and approved by the Regional Board prior to commencement of any discharge from the proposed facility.

Order No. 74-492 should be modified by the State Board pursuant to Water Code Section 13320(c)(3).

#### IV. ORDER

IT IS HEREBY ORDERED as follows:

1. Regional Board Order No. 74-492, attached hereto, is modified as hereinafter set forth. As modified, Regional Board Order No. 74-492 is adopted.

2. Regional Board Order No. 74-492, as modified, is hereby remanded to the Regional Board for all purposes including, but not limited to, such future modification of requirements as may be deemed necessary, any appropriate additional or revised monitoring and reporting requirements, and all appropriate enforcement activities.

Dated: April 2, 1975

We Concur:

/s/ Roy E. Dodson  
Roy E. Dodson  
Member

/s/ W. W. Adams  
W. W. Adams, Chairman

/s/ Mrs. Carl H. Auer  
Mrs. Carl H. (Jean) Auer  
Member

/s/ W. Don Maughan  
W. Don Maughan, Vice Chairman

APPENDIX I

EXPECTED OCCURRENCE OF LOW AND REVERSE  
FLOW AT FREEPORT

(Flows Less Than 4,000 cfs)

<u>Month</u>	<u>Days Affected</u>	<u>Duration, Hours</u>	<u>Flow Reversal Duration, Hours</u>
January	4.8	29.1	12.8
February	0.2	0.4	0
March	0.8	3.0	0.5
April	1.0	4.9	1.7
May	4.5	18.1	3.5
June	8.3	38.2	8.5
July	6.5	11.3	0.2
August	4.1	10.3	0.2
September	2.8	8.3	1.2
October	5.0	20.7	5.4
November	8.0	43.6	14.2
December	5.6	24.6	5.2
Annual	51.6	213.0	53.4

EMERGENCY HOLDING BASIN  
STORAGE REQUIREMENTS

Average Plant Flow (mgd)	Average River Flow (cfs)	Critical River Flow (cfs)	Storage (mg)		Max. Allow. Return Rate (mgd)	Return Period (hrs)	Net Accum. at Max. Allow. Return Rate <sup>1</sup> (mg)	Lowest Return Rate Utilizing Full Storage (mgd)
			Per High Tide	Per Day				
<u>Seasonal Dry Weather Conditions</u>								
125	8,300	4,000	22.5	45	115	14	0	44
125	8,300	6,000	26	52	115	14	0	56
150	8,300	4,000	27	54	90	14	14	59
150	8,300	6,000	30.5	61	90	14	60	71
150	9,900	4,000	23	46	90	15	0	42
150	9,900	6,000	28.5	57	90	15	0	60
150	11,600	4,000	15.5	31	90	17	0	16
150	11,600	6,000	21	42	90	17	0	32
<u>Non-Seasonal Dry Weather Conditions</u>								
110	11,600	4,000	12	24	130	17	0	6
135	11,600	4,000	15	30	105	17	0	15
<u>Wet Weather Conditions<sup>2</sup></u>								
170	8,300	4,000	32	64	70	14	46	0
170	8,300	6,000	35	70	70	14	58	3
200	8,300	4,000	36	72	40	14	98	7
200	8,300	6,000	42	84	40	14	122	28
200	9,900	4,000	31	62	40	15	74	0
200	9,900	6,000	38	76	40	15	109	13
200	11,600	4,000	22	44	40	17	32	0
200	11,600	6,000	28	56	40	17	62	0

1. 7 day period for dry weather and 2 day period for wet weather.

2. Average plant flow based on 75 percent of PWWF.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

REPORTING REQUIREMENTS FOR  
DISCHARGES TO SURFACE WATERS

1. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.
- \*2. The discharger shall file a written report with the Board within 90 days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of his waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of his facilities.

The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. (Reference: Sections 13260, 13267(b), and 13268, California Water Code.)
- \*\*3. The discharger shall notify the Board not later than 180 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge and appropriate filing fee.
- \*4. The discharger shall notify the Board of (a) new introduction into such works of pollutants from a source which would be a new source as defined in Section 306 of the Federal Water Pollution Control Act, or amendments thereto, if such source were discharging pollutants to the waters of the United States, (b) new introductions of pollutants into such works from a source which would be subject to Section 301 of the Federal Water Pollution Control Act, or amendments thereto, if it were discharging such pollutants to the waters of the United States, (c) a substantial change in the volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time the waste discharge requirements were adopted. Notice shall include a description of the quantity and quality of pollutants and the impact of such change on the

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\* Publicly owned facilities only

\*\* For nonpublic facilities only

quantity and quality of effluent from such publicly owned treatment works. A substantial change in volume is considered an increase of ten percent in the mean dry-weather flow rate. The discharger shall forward a copy of such notice directly to the Regional Administrator.

5. The discharger shall file with the Board a report on waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- \*\*6. This Board requires the discharger to file with the Board, within 90 days after the effective date of this Order, a technical report on his preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:
  - (a) Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
  - (b) Evaluate the effectiveness of present facilities and procedures and state when they became operational.
  - (c) Describe facilities and procedures needed for effective preventive and contingency plans.
  - (d) Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational. (Reference: Sections 13267(b) and 13268, California Water Code.)

This Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger.

- \*\*7. The discharger shall submit to the Board, by January 30 of each year, an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiling water treatment and which are discharged.

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\*\* For nonpublic facilities only

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

GENERAL MONITORING AND REPORTING PROVISIONS

GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

Unless otherwise noted, all sampling, sample preservation, and analyses shall be conducted in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" or as approved by the Executive Officer.

All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Public Health or a laboratory approved by the Executive Officer.

Effluent samples shall be taken downstream of any addition to the treatment works and prior to mixing with the receiving waters.

The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to insure accuracy of measurements, or shall insure that both activities will be conducted.

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period. The volume of each individual sample is proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

GENERAL PROVISIONS FOR REPORTING

For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

By January 30 of each year, the discharger shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

The discharger shall maintain all sampling and analytical results, including strip charts; date, exact place, and time of sampling; date analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Monitoring results shall be submitted on forms provided by the Board.

Monitoring reports shall be signed by:

- a. In the case of corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates.
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

The discharger shall mail a copy of each monitoring report on the appropriate form to be supplied by the Board to:

Regional Administrator  
Environmental Protection Agency  
Region IX  
100 California Street  
San Francisco, California 94111

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

STANDARD PROVISIONS FOR  
DISCHARGES TO SURFACE WATERS

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
2. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- \*3. The discharger shall require any industrial user of the treatment works to comply with applicable service charges and toxic and pretreatment standards promulgated in accordance with Sections 204(b), 307, and 308 of the Federal Water Pollution Control Act or amendments thereto. The discharger shall require each individual user to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the Federal Water Pollution Control Act or amendments thereto. The discharger shall forward a copy of such notice to the Board and the Regional Administrator.
4. The discharger shall permit the Regional Board:
  - (a) Entry upon premises in which an effluent source is located or in which any required records are kept;
  - (b) Access to copy any records required to be kept under terms and conditions of this Order;
  - (c) Inspection of monitoring equipment or records, and
  - (d) Sampling of any discharge.
5. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.
6. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.
7. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Division 7.5 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a regional water quality control board and which is in full compliance therewith.

\* Publicly owned facilities only

8. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
  - (a). Violation of any term or condition contained in this Order;
  - (b) Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
  - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
9. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Water Pollution Control Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this order, the Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
10. There shall be no discharge of harmful quantities of oil or hazardous substances, as specified by regulation adopted pursuant to Section 311 of the Federal Water Pollution Control Act, or amendments thereto.
11. In the event the discharger is unable to comply with any of the conditions of this Order due to:
  - (a) breakdown of waste treatment equipment;
  - (b) accidents caused by human error or negligence; or
  - (c) other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

## INDUSTRIAL WASTEWATER PRETREATMENT REQUIREMENTS

### Submittal of Information

The discharger shall submit to the Board:

- (a) Not later than one year from the effective date of this permit, the information described in Section IV of EPA Form 7550-22 for each major contributing industry;
- (b) At least 120 days prior to its initiation, notification of any new introduction of pollutants from sources which, if they were to discharge to the waters of the United States, including the territorial seas, would be a new source as defined in Section 306 of the Federal Water Pollution Control Act, or a major contributing industry subject to Section 301 of the Act. Such notification shall include the information described in Section IV of EPA Form 7550-22;
- (c) Notification of any substantial change in volume or character of pollutants discharged by an existing source. Such notice shall include the information described in Section IV of EPA Form 7550-22 and the anticipated impact, if any, on the quality or quantity of effluent discharged from the discharger's facilities.

After receipt and review of such information, the Board may revise or modify the terms of this order, including any necessary effluent limitations for pollutants not identified and limited herein.

### 2. Control of Industrial Pollutants

- (a) The discharger shall require all industrial users of its treatment works to comply with the requirements of Section 307 of the Federal Water Pollution Control Act and regulations adopted thereunder.  
All existing nondomestic users shall be required to comply with pretreatment standards for prohibited wastes, and all existing major contributing industries shall be required to comply with pretreatment standards established for incompatible pollutants. Compliance with such standards shall be achieved within the shortest reasonable time but not later than three years from the date of their promulgation.  
All new industrial sources shall be required to comply with pretreatment standards established pursuant to Section 307(c) of the Federal Water Pollution Control Act upon initiation of a discharge into the treatment works.
- (b) The discharger shall within 12 months of the effective date of this permit submit to the Board for each major contributing industry either evidence of compliance with pretreatment standards promulgated pursuant to Section 307(b) of the Act, or a report, on a form to be furnished by the Board which shall set forth the effluent limit to be achieved and an implementation schedule for the achievement of compliance by the required date. Such implementation schedules shall in every case provide for the initiation of any needed construction of pretreatment facilities within 18 months of the date of promulgation of applicable pretreatment standards.

### 3. Compliance Monitoring

- (a) The discharger shall monitor the compliance of all affected sources with the provisions of this order and shall submit quarterly reports on the status of such compliance to the Board. These quarterly compliance reports shall begin one year after the effective date of this permit.
- (b) The discharger shall report quarterly to the Board each instance of compliance or noncompliance by an affected source with the provisions of implementation schedules submitted as required by paragraph 2(b) above.
- (c) The wastewater flow of each affected source that is not covered by a current implementation schedule shall be monitored by the discharger or at the direction of the discharger, by the source, or by both, in such a manner and frequency so as to

produce information that will demonstrate to the satisfaction of the Board compliance or noncompliance with the pretreatment standards applicable to such source. Results of such monitoring shall be reported by the discharger on the Discharge Monitoring Report Form and shall be included in the quarterly compliance report described in (a) above.

#### 4. Definitions

(a) An "industry" is any facility identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended and supplemented, under the following divisions:

- (1) Division A - Agriculture, Forestry, and Fishing;
- (2) Division B - Mining;
- (3) Division D - Manufacturing;
- (4) Division E - Transportation, Communications, Electric, Gas & Sanitary Services;
- (5) Division I - Services.

A facility in the Divisions listed may be excluded if it is determined by the Board that it introduces primarily domestic wastes or wastes from sanitary conveniences.

(b) A "major contributing industry" is one that:

- (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Act; or (4) is found by the Board to have significant impact, either singly or in combination with other contributing industries, on the treatment works or the quality of its effluent.

(c) A "treatment works" is any facility, method or system for the storage, treatment, recycling, or reclamation of municipal sewage or industrial wastes of a liquid nature including waste in combined storm water and sanitary sewer systems.

(d) "Prohibited wastes" are any of the following wastes, which shall not be introduced into the treatment works:

- (1) Wastes which create a fire or explosion hazard in the treatment works;
- (2) Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is designed to accommodate such wastes;
- (3) Solid or viscous wastes in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the treatment works; or
- (4) Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(e) An "incompatible pollutant" is any pollutant which is not a compatible pollutant.

(f) A "compatible pollutant" means biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, plus additional pollutants identified as compatible in this permit if the treatment works was designed to treat such pollutants, and in fact does remove such pollutants to a substantial degree.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 74-492

NPDES NO. CA0077682

WASTE DISCHARGE REQUIREMENTS  
FOR  
CENTRAL WASTEWATER TREATMENT PLANT  
AND  
SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT  
SACRAMENTO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

1. The Sacramento Regional County Sanitation District submitted a report of waste discharge NPDES No. CA0077682, received December 28, 1973, and a "Supplement A" received July 12, 1974.
2. The Central Sanitation District of Sacramento County presently discharges 15.8 mgd (annual average) from an existing 25 mgd plant which is in the process of being upgraded to 30 mgd and the Sacramento Regional County Sanitation District proposes to discharge 125 mgd of treated domestic and industrial waste from secondary (activated sludge) treatment facilities into the Sacramento River, a water of the United States, at a point on the east bank approximately 600 feet downstream from the Freeport Bridge.
3. The report of waste discharge, Supplement A, describes the existing discharge as follows:

Average Flow:	15.8 mgd (annual average)
Lowest monthly average:	13.6 mgd
Highest monthly average:	19.9 mgd
Average temperature (influent):	80°F summer; 70°F winter
Average BOD <sub>5</sub> :	25 mg/l (annual average)
Average total suspended solids:	32 mg/l (annual average)
Average settleable matter:	1.0 ml/l (annual average)
4. The Sacramento Regional County Sanitation District, proposes to construct a 125 mgd secondary plant at the present Central Sanitation District treatment facility to treat and dispose of wastes from the City of Sacramento together with consolidated waste flows from the populous unincorporated portions of the greater Sacramento area.
5. The location of the proposed point of discharge, 600 feet downstream from the Freeport Bridge, is consistent with the objectives of basin planning. The current state of technology and information regarding Sacramento River and Delta Water Quality conditions indicates that the proposed discharge program is the most desirable and cost effective.

6. Present requirements do not reflect the scope of the proposed waste consolidation plans, nor do they adequately control deleterious waste constituents at levels that will protect the beneficial uses of the receiving waters in accordance with the Interim Plan.
7. The discharge is into estuarine waters of the State. The State Water Resources Control Board, on May 16, 1974, in Resolution No. 74-43, adopted the "Water Quality Control Policy for the Enclosed Bays and Estuaries of California".
8. The discharge of the Sacramento Regional County Sanitation District, Secondary Treatment Plant, to receiving waters will be through a diffuser, emplaced in the Sacramento River, and designed to meet the Resolution No. 74-43 policies.
9. The Sacramento River in the vicinity of the proposed discharge point experiences slack flows and flow reversals.
10. The Board on June 15, 1971, adopted an Interim Water Quality Control Plan for the Sacramento River Subbasin and Sacramento-San Joaquin Delta Subbasin. The Interim Basin Plan contains water quality objectives for the Sacramento River.
11. The beneficial uses of the Sacramento River and downstream waters are: municipal, agricultural, and industrial supply; recreation, including body contact sports; esthetic enjoyment; navigation, and the preservation and enhancement of fish, wildlife, and other aquatic resources.
12. Effluent limitation and toxic and pretreatment effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.
13. The discharge from the Central Wastewater Treatment Plant is presently governed by waste discharge requirements adopted by the Board on February 14, 1969, in Resolution No. 69-175, which allows a discharge to surface waters and which will remain in effect until rescinded.
14. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
15. The Board in a public meeting heard and considered all comments pertaining to the discharge.
16. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect ten days from the date of hearing provided the Regional Administrator has no objections.

IT IS HEREBY ORDERED, Central Sanitation District of Sacramento County and Sacramento Regional County Sanitation District, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations:

1. Prior to March 30, 1979, the discharge of an effluent in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>7-day Average</u>	<u>30-day Median</u>	<u>Daily Maximum</u>
B.O.D. (1)	mg/l	30	45	--	90
	lbs/day	7,500	11,260	--	22,520
Total Suspended Solids	mg/l	30	45	--	90
	lbs/day	7,500	11,260	--	22,520
Settleable Matter	ml/l	0.2	0.5	--	1.0
Total Coliform Organisms	MPN/100 ml	200 (2)	400 (2)	--	2,300
Oil and Grease (3)	mg/l	10	--	--	15
	lbs/day	2,500	--	--	3,750

2. The arithmetic mean biochemical oxygen demand (5-day) and suspended solids levels, by weight, in effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).
3. Effective on December 31, 1975, the effluent chlorine residual shall not exceed a maximum of 0.1 mg/l.
4. Effective on December 31, 1975, survival of test fishes in 96-hour bioassays of undiluted waste shall be no less than:

Minimum for any one bioassay-----70%  
 Median for any five consecutive bioassays---90%

- (1) 5-day, 20°C Biochemical Oxygen Demand
- (2) The 30-day and 7-day averages for total coliform organisms are the geometric means of samples collected, respectively in a 30-day and 7-day period.
- (3) Trichlorotrifluorethane Extraction Method

5. Effective April 1, 1979, the discharge of an effluent in excess of the following limits is prohibited from the 125 mgd Regional Wastewater Treatment Plant:

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>7-day Average</u>	<u>30-day Median</u>	<u>Daily Maximum</u>
B.O.D. (1)	mg/l	30	45		60
	lbs/day	31,300	47,000		62,600
Total Suspended Solids	mg/l	30	45	--	60
	lbs/day	31,300	47,000	--	62,600
Settleable Matter	ml/l	0.1	--	--	0.5
Total Coliform Organisms	MPN/100 ml	--	--	23	500
Grease & Oil	mg/l	10	--	--	15
	lbs/day	10,500	--	--	15,700
Nitrogen (Total Fixed) (2)	mg/l	--	--	--	15 (3)
	lbs/day	--	--	--	15,700

6. Prior to March 30, 1979, the average daily dry weather discharge shall not exceed 30 mgd.
7. Effective March 30, 1979, the monthly average dry weather discharge shall not exceed 125 mgd.
8. The discharge shall not have a pH less than 6.5 nor greater than 8.5 nor shall it cause a change greater than 0.5 in the pH of the receiving waters.
9. Bypass or overflow of untreated or partially treated waste is prohibited.
10. The discharger shall use the best practicable cost effective control technique currently available to limit mineralization to no more than a reasonable increment.
11. The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20 Fahrenheit degrees.
12. Discharge to the Sacramento River is prohibited when the downstream velocity in the Sacramento River at the point of discharge is less than 0.5 feet per second (approximately 4,000 cubic feet per second).

(1) 5-day, 20°C Biochemical Oxygen Demand

(2) Existing water quality standards call for a limit of 1 mg/l of total nitrogen in the receiving waters. Current planning efforts are directed toward a review of that limit. When the Fully Developed Basin Plan is adopted, and available for guidance, the limit may be modified.

(3) Effective when Sacramento River flow is <12,000 cfs at Freeport.

B. Receiving Water Limitations:

1. The discharge shall not cause the dissolved oxygen concentration in the receiving waters to fall below 5.0 mg/l, nor shall it depress the dissolved oxygen concentration of the receiving waters by more than 0.5 mg/l.
2. The discharge shall not cause visible oil, grease, scum, or foam in the receiving waters or watercourses.
3. The discharge shall not cause concentrations of any materials in the receiving waters which are deleterious to human, animal, aquatic, or plant life.
4. The discharge shall not cause esthetically undesirable discoloration of the receiving waters.
5. The discharge shall not cause fungus, slimes, or other objectionable growths in the receiving waters.
6. The discharge shall not cause bottom deposits in the receiving waters.
7. The discharge shall not cause floating or suspended materials in the receiving waters.
8. The discharge shall not increase the turbidity of the receiving waters by more than 10% over background levels.
9. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
10. The discharge shall not cause a surface water temperature rise greater than 4 Fahrenheit degrees above the natural temperature of the receiving waters at any time or place.
11. The discharge either individually or in combination with other discharges shall not create a zone, defined by water temperatures of more than one Fahrenheit degree above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of the main river channel at any point.

C. Discharge Specifications, Sewage Sludges:

1. The discharge shall not cause a pollution.
2. Neither the discharge nor its treatment or processing shall cause a nuisance.
3. The discharge of sewage sludges into surface waters or surface water drainage courses is prohibited.

D. Provisions:

1. Neither the discharge nor its treatment shall create a nuisance as defined in the California Water Code.
2. The discharger shall develop and prepare to implement a appropriate contingency plan which will provide for continuation of facility operation during strikes, other labor disruption, or any other foreseeable emergency. Such contingency plan shall be submitted to and approved by the Central Valley Regional Board prior to commencement of any discharge from the proposed regional facility.
3. The Central Sanitation District of Sacramento County and Sacramento Regional County Sanitation District, shall comply with the following time schedule to assure compliance of this Order:

<u>Task</u>	<u>Date</u>	<u>Report of Compliance Due</u>
Develop work plan ) Develop conceptual plan)	Completed	
Complete Plans and Specifications	July 1, 1975	July 15, 1975
Full Compliance with A.3 & A.4	Dec. 31, 1975	Jan. 15, 1976
Interim Progress Report	Mar. 1, 1976	Mar. 15, 1976
Interim Progress Report	Dec. 1, 1976	Dec. 15, 1976
Interim Progress Report	Sept. 1, 1977	Sept. 15, 1977.
Interim Progress Report	Jun. 1, 1978	Jun. 15, 1978
Complete Construction	Dec. 15, 1978	Dec. 30, 1978
Full Compliance with A.5, A.11, A.12, B.8, B.10, & B.11	Mar. 30, 1979	Apr. 15, 1979

The Sacramento Regional County Sanitation District shall submit to the Board on or before each compliance report date, a report detailing compliance or noncompliance with the specific schedule date and task.

If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the discharger will be in compliance. The discharger shall notify the Board by letter when he has returned to compliance with the time schedule.

4. The requirements prescribed by this Order amend the requirements prescribed by Resolution No. 69-175 adopted by the Board on February 14, 1969, which shall remain in full force and effect until rescinded.
5. This Order includes Items 1, 2, 4, and 5 of the attached "Reporting Requirements".
6. This Order includes Items 1 through 11 inclusive of the attached "Standard Provisions".
7. This Order includes the attached "Industrial Wastewater Pretreatment Requirements".
8. The discharger shall comply with the Monitoring and Reporting Program No. 74-492 and the General Provisions for Monitoring and Reporting as specified by the Executive Officer.
9. This Order expires on October 1, 1979, and the Sacramento Regional County Sanitation District must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
10. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
11. The daily discharge rate is obtained from the following calculation for any calendar day:

$$\text{Daily discharge rate} = \frac{8.34}{N} \sum_{1}^{N} Q_i C_i$$

in which N is the number of samples analyzed in any calendar day.  $Q_i$  and  $C_i$  are the flow rate (MGD) and the constituent concentration (mg/l) respectively, which are associated with each of the N grab samples which may be taken in any calendar day. If a composite sample is taken,  $C_i$  is the concentration measured in the composite sample, and  $Q_i$  is the average flow rate occurring during the period over which samples are composited.

The 7-day and 30-day average discharge rates shall be the arithmetic average of all the values of daily discharge rate calculated using the results of analyses of all samples collected during any 7 and 30 consecutive calendar day period respectively. If fewer than four samples are collected and analyzed during any 30 consecutive calendar day period, compliance with the 30-day average discharge rate limitation shall not be determined. If fewer than three samples are collected and analyzed during any 7 consecutive calendar day period, compliance with the 7-day average rate limitation shall not be determined.

The daily maximum concentration shall be determined from the analytical results of any sample, whether discrete or composite.

I, BILL B. DENDY, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Valley Region, on October 25, 1974, as amended by the State Water Resources Control Board on April 2, 1975.

/s/ Bill B. Dendy  

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Bill B. Dendy  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 74-492  
FOR  
CENTRAL WASTEWATER TREATMENT PLANT  
AND  
SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT  
SACRAMENTO COUNTY

EFFLUENT MONITORING

Effluent samples shall be collected downstream from the last connection through which wastes can be admitted into the outfall. Samples collected from the outlet structure of ponds will be considered adequately composited. The following shall constitute the effluent monitoring program:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD <sub>5</sub>	mg/l, lbs/day	24 hr. Composite	Daily
Total Suspended Matter	mg/l, lbs/day	24 hr. Composite	Daily
Settleable Matter	ml/l	Grab	Daily
Total Dissolved Solids	mg/l	Grab	Twice Weekly
Specific conductivity	Micromhos/cm @ 25°C	Grab	Daily
Standard Minerals **	mg/l	Grab	Twice Yearly
pH	Numbers		Continuous
Bioassay	% Survival	24 hr. Composite	Twice Weekly
Total Coliform Organisms	MPN/100 ml	Grab	Daily*
Nitrogen (Total) <sup>(1)</sup>	mg/l	Grab	Daily <sup>(2)</sup>
Chlorine Residual	mg/l		Continuous
Flow Rate	MGD	--	Continuous
Grease and Oil	mg/l	24 hr. Composite	Daily
Temperature	°F	--	Weekly

\*Sampling frequency will be reduced when correlation with chlorine residual is established. Chlorine residual should be determined before dechlorination as well as indicated above.

(1) The sum of organic, ammonia, nitrate, and nitrite nitrogen concentrations.

(2) Daily analyses are required when the Sacramento River flow at Clarksburg is less than 12,000 cfs.

\*\* Carbonate (CO<sub>3</sub>), Bicarbonate (HCO<sub>3</sub>), Chloride (Cl), Sulfate (SO<sub>4</sub>), Nitrate (NO<sub>3</sub>), Calcium (Ca), Magnesium (Mg), Sodium (Na), Potassium (K), TDS, Electrical Conductivity (Micromhos/cm)

MONITORING AND REPORTING PROGRAM  
 CENTRAL WASTEWATER TREATMENT PLANT AND  
 SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Receiving water samples shall be taken from the following:

<u>Station</u>	<u>Description</u>
R-1	Sacramento River at Freeport Bridge
R-2	Sacramento River at Scribners Bend Light Station.
R-3	Sacramento River at Courtland Bridge (Highway 160)
R-4	Sacramento River at I Street Bridge

<u>Constituents</u>	<u>Units</u>	<u>Station</u>	<u>Sampling Frequency</u>	<u>Type of Sample</u>
Dissolved Oxygen	mg/l	R-1, R-2, R-3	Weekly	(1)
Coliform Organisms	MPN/100 ml	R-1, R-2, R-3	Weekly	(1)
Total Nitrogen	mg/l	R-1, R-2, R-3	Weekly	(2)
Temperature	°C	R-1, R-2, R-3	Weekly	(1)
River Flow Rate <sup>(3)</sup>	cfs	R-4	Weekly	

- (1) Grab Samples shall be taken at mid depth of midstream.
- (2) Weekly when the Sacramento River flow is 12,000 cfs or less; twice monthly when the river flows are greater than 12,000 cfs but less than 40,000 cfs. Monitoring is not required when the flow exceeds 40,000 cfs.
- (3) Sacramento U. S. G. S. Gauging Station at Sacramento, 1000 feet upstream of the "I" Street Bridge on the east bank of the Sacramento River.

INFLUENT MONITORING

A sampling station shall be established and located where representative samples of the influent can be obtained. The following shall constitute the influent monitoring program:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>
20°C BOD <sub>5</sub>	mg/l	24 hr. Composite
Suspended Solids	mg/l	24 hr. Composite
Temperature	°F	Grab

Samples shall be collected monthly at approximately the same time as effluent samples and should be representative of the influent for the month sampled.

MONITORING AND REPORTING PROGRAM  
CENTRAL WASTEWATER TREATMENT PLANT AND  
SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. The following shall constitute the water supply monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Sampling Frequency</u>
Standard Minerals	mg/l	Yearly
Specific Conductivity	Micromhos/cm @ 25°C	Monthly
Total Dissolved Solids	mg/l	Yearly

\* When this is not possible because of supplemental supplies, the County may calculate the average monthly specific conductance in the municipal supply based upon the approximate proportional amount from each source.

REPORTING

In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly the compliance with waste discharge requirements.

Monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month.

If the discharger monitors any pollutant at the locations designated herein more frequently than is required by this order, he shall include the results of such monitoring in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

Original signed by  
James A. Robertson  
Ordered by JAMES A. ROBERTSON, Executive Officer

25 October 1974

(Date)

